

REMARKS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-18 are currently pending. Claims 1, 4-9, and 12-16 have been amended; and Claims 17 and 18 have been added by the present amendment. The changes and additions to the claims are supported by the originally filed specification and do not add new matter.

In the outstanding Office Action, Claims 1-5, 8, 9-13, and 16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,288,809 to Touma et al. (hereinafter “the ‘809 patent”) in view of U.S. Patent No. 6,434,164 to Matsunaga et al. (hereinafter “the ‘164 patent”); and Claims 6, 7, 14, and 15 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the ‘809 and ‘164 patents, further in view of U.S. Patent No. 5,828,737 to Sawyer (hereinafter “the ‘737 patent”).

Amended Claim 1 is directed to a digital content downloading system using a network in which digital content possessed by a digital content retailer is downloaded to one of a plurality of consumers through a network, comprising: (1) a plurality of subscriber lines each formed of an optical fiber and arranged between the consumers and the network, the network being managed by a network operator; (2) an optical line terminator, arranged on one side of the network, for terminating a subscriber line on the network side; (3) an optical network unit, arranged on a side of each consumer, for terminating a subscriber line on the consumer side; (4) a star coupler configured to connect the subscriber lines terminated by the optical network units to the subscriber line terminated by the optical line terminator; (5) a resource reservation server configured to reserve a particular bandwidth for the digital content and in the subscriber lines in response to a request by a particular consumer; and (6) downward bandwidth managing means, arranged in the optical line terminator, for controlling downloading of the digital content from the digital content retailer to the optical network unit

of the particular consumer so that the digital content is transmitted through the subscriber lines and the star coupler at the particular bandwidth reserved by the resource reservation server. Claim 1 has been amended for the purpose of clarification only and no new matter has been added.

Regarding the rejection of Claim 1 under 35 U.S.C. § 103, the Office Action asserts that the '809 patent discloses everything in Claim 1 with the exception of the resource reservation server and the downward bandwidth managing means, and relies on the '164 patent to remedy those deficiencies.

The '809 patent is directed to an optical subscriber network system that connects plural optical network units to an optical service unit using passive optical elements through an optical transmission line. However, as admitted in the Office Action, the '809 patent fails to disclose the resource reservation server and the downward bandwidth managing means recited in amended Claim 1.

The '164 patent is directed to a multiple-access communication system in which a center station dynamically allocates upstream bandwidth to subscriber stations upon receiving reservation information from a subscriber station. The '164 patent discloses that bandwidth may be reserved for subscriber stations to send data to the central station. However, Applicants respectfully submit that the '164 patent fails to disclose downward bandwidth managing means, *arranged in the optical line terminator*, for controlling the *downloading of the digital content from the digital content retailer to the optical network unit of the particular consumer*, so that the digital content is transmitted through the subscriber lines and the star coupler at the particular bandwidth reserved by the resource reservation server, as recited in amended Claim 1. The '164 patent fails to disclose that a downward bandwidth management means is arranged in an optical line terminator for controlling downloading of data. Further, the '164 patent fails to disclose that bandwidth is reserved for the *downloading*

of digital content from a retailer to an optical network unit of a consumer. Rather, the '164 patent merely discloses the reservation of bandwidth for sending data from a subscriber unit to a center station.

Thus, no matter how the teachings of the '809 and '164 patents are combined, the combination does not teach or suggest the downward bandwidth management means recited in amended Claim 1. Accordingly, Applicants respectfully submit that a *prima facie* case of obviousness has not been established and that the rejection of Claim 1 (and dependent Claims 2-5 and 8) should be withdrawn.

Claim 9 recites limitations analogous to the limitations recited in Claim 1. Accordingly, and for the reasons stated above and for the patentability of Claim 1, Applicants respectfully submit that a *prima facie* case of obviousness has not been established and that the rejection of Claim 9 (and dependent Claims 10-13 and 16) should be withdrawn.

Regarding the rejection of dependent Claims 6, 7, 14, and 15, Applicants respectfully submit that the '737 patent fails to remedy the deficiencies of the '809 and '164 patents, as discussed above. In particular, the '737 patent fails to disclose the downward bandwidth management means recited in independent Claims 1 and 9. Accordingly, Applicants respectfully submit that a *prima facie* case of obviousness has not been established and that the rejection of dependent Claims 6, 7, 14, and 15 should be withdrawn.

The present amendment also sets forth new Claims 17 and 18 for examination on the merits. Claim 17, which depends from Claim 1, recites that the resource reservation server is arranged in the network separate from the optical line terminator and the optical network units. Moreover, Claim 18, which depends from Claim 1, recites that the resource reservation server is configured to reserve the particular bandwidth so that the particular bandwidth is reserved from a particular start time to a particular end time. New Claims 17 and 18 are

supported by the originally filed specification and do not add new matter.¹ Further, based on the asserted reliability of Claim 1, Applicants respectfully submit that Claims 17 and 18 patentably define over any proper combination of the '809, '164, and '737 patents.

Thus, it is respectfully submitted that independent Claims 1 and 9 (and all associated dependent claims) patentably define over any proper combination of the '809, '164, and '737 patents.

Consequently, in view of the present amendment and in light of the above discussion, the outstanding grounds for rejection are believed to have been overcome. The application as amended herewith is believed to be in condition for formal allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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¹ See, e.g., Figures 2 and 6.